Software Solutions

ASG-SmartQuest™

Quick Reference Card

Version 7.0

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Introduction

ASG-SmartQuest is a powerful, yet easy-to-use tool for analyzing batch and CICS transaction abends. Source-level support is provided for your COBOL, PL/I, and Assembler programs. You can view the source code for your abending programs online with the failing statement clearly highlighted. In addition, the individual contents of your program variables are displayed for quick and easy examination. Most control blocks are shown mapped with their field names automatically and, if you use the source support feature, ASG-SmartQuest also automatically maps areas, such as your COBOL working storage and your PL/I DSA

Analyzing Dumps

The Source Display

ZOOMing on an address that is within program storage provides the source support for the failing program. When source support is available, it is shown in preference to any other display type. The appropriate source support information must be held in the ASG-SmartQuest SOURCE file or the ESW Application Knowledge Repository (AKR) to show the source for your failing programs.

The Disassembly Display

When source support is not available for a particular program, a Disassembly display is shown for all program storage. The machine instruction portion may contain addresses and you can use any byte of this portion of the display as the start of a 4-byte address for ZOOMing.

The Mapped Storage Display

When you select an area of non-program storage, ASG-SmartQuest attempts to automatically overlay the storage area with its field names. The field name, length, data type, address, offset within the area, and contents at the time of the abend are given for each field.

The Core Display

When you select an area of non-program storage that cannot be automatically mapped with field names, a Core display is provided. This is a standard dump format with hexadecimal data on the left and character data on the right.

Navigation Aids

View Stacking

Each time you view a new screen by using the action bar, ZOOMing, or typing an equivalent command, the previous screen is pushed onto a stack. A stack has 10 levels and holds your last 10 screens. PF3 or the END command returns you to a previous screen in the stack.

Multiple Views

ASG-SmartQuest enables you to preserve a stack of displays. You can open a maximum of four view stacks at any one time. The view stack you are currently using is clearly shown on the screen. The fourth line always says VIEW *n*, where *n* is a number from 1 through 4. By default you are always in VIEW 1.

ZOOMing

To zoom to more detailed information, you can position the cursor and press Enter (point and shoot technique) on any field shown in green on a terminal capable of handling full extended 3270 data streams, or any highlighted field on a monochrome display.

Action Bar

Option	Description
File	Displays a list of available dump index files and enables you to add or select current source file.
Filter	Filters the number of dumps that are displayed on the Dump Selection List pull-down screen.
List	Lists the dumps matching the criteria entered in the Dump Filter Criteria pull-down screen. You can select, print, hold or delete dumps.
Details	Enables you to choose the areas or details that you want to analyze within the dump.
Labels	Enables you to assign labels to the dump screens and use those labels to redisplay a screen.
Maps	Displays the DSECTs and other storage area layouts for the dump.
Toggles	Provides a set of simple switches for the ASG-SmartQuest for CICS features.
Help	Provides high-level reference information for the experienced user.

Labeling Screens

Every ASG-SmartQuest screen, with the exception of the pull-downs and the CICS Last 3270 display, can be assigned a label and redisplayed at any time using that label.

To assign or reassign labels use the SET command. The syntax for this is:

`SET` *`label`* or `S` *`label`*

The label can be between 1 and 30 characters in length. The first character must be an alphabetic character (A through Z) but the remaining can be any keyboard characters, including imbedded blanks.

To redisplay a labeled screen use the LOCATE command. The syntax for this is:

`LOCATE` *`label`* or `L` *`label`*

Command Summary

Action Bar Equivalent Commands

› **DETAILS or DETS**
Displays the Dump Details Menu pull-down screen.

› **FILE**
Displays the File Selection Menu for selecting dump indexes and source files.

› **FILTER**
Displays the Dump Filter Criteria pull-down.

› **HELPM**
Displays the Help Menu pull-down screen for access to online help.

› **LABELS or LABS**
Displays the Labels pull-down screen. The command is effective only if labels have been assigned.

› **LIST**
Displays the Selected Dump List pull-down screen listing the requested dumps.

› **MAPSEL**
Displays the Map Selection Menu pull-down screen. This command is effective only on screens where field mapping is allowed.

› **TOGGLES**
Displays the Toggles pull-down screen.

Controlling the View Stacks Commands

› **CLOSE** *n*
Closes a view stack without losing its contents. *n* is the number of the view stack to be closed in the range 1 through 4.

› **END**
Drops down a level in the current view stack. The current display is discarded.

› **SWAP**
Switches logically from the current view stack to the next open view stack. If all 4 view stacks are open the sequence goes from 1 to 2, to 3, to 4 and back to 1.

› **VIEW** *n* **or V***n*
Opens a new view stack or switches the current display to an already opened view stack. There are a maximum of 4 view stacks; *n* must be 1 through 4.

Mapped Display Commands

› **CORE**
Switches from a Mapped display to a Core display.

› **F string FIRST/LAST/NEXT/PREV**
Searches only the field names portion of the screen looking for a name with its initial characters matching the specified string. NEXT is assumed if PREV, FIRST and LAST are omitted.

› **RFIND**
Repeats the last FIND command issued.

Trace Display Commands (CICS)

› **F** *string* **FIRST/LAST/NEXT/PREV** *start-column end-column*
Finds the specified string in your trace.

› **RFIND**
Repeats the last FIND command issued.

Source Display Commands

› **ASSEM or ROLL**
Switches from a Source to a Disassembly display.

› **CORE**
Switches from a Source display to a Core (standard dump format) display.

› **F** *string* **FIRST/LAST/NEXT/PREV** *start-column end-column*
Finds the specified string in your source listing.

› *** or INS**
Displays the page of source containing the failing or calling statement.

› **LOCATE** *nnnnnn* **or L** *nnnnnn*
Locates the specified source line *nnnnnn*, where *nnnnnn* is in the range 1 to the maximum line number of the program being displayed.

› **RFIND**
Repeats the last FIND command issued.

› **USING** *dsect-name*,**R***nn*
Changes the default base register used to calculate the address and contents of fields in the specified DSECT (Assembler Source displays only).

Dump Details Equivalent Commands

› **DB2**
Displays the last DB2 call information screen.

› **DLI or DL1**
Displays the last DL/1 call information screen.

› **IBMHELP or IBMHELP** *abend code*
Displays the help information from the IBM-supplied CICS/ESA file DFHCMACD.

› **PROGRAMS or PROGS**
Displays the Program calling chain detail screen.

› **PSW or REGS**
Displays the Selected Dump List pull-down screen listing the requested dumps.

› **SCRN or XSCRN**
Displays the last 3270 screen, if available.

› **SPROGS**
Displays the Program calling chain summary screen.

› **SUMMARY or SUM**
Displays the Abend summary screen.

› **STORAGE or STOR**
Displays the CICS control block and acquired storage screen.

› **TRACE**
Displays the Trace table entries.

Disassembly Display Commands

› **CORE or ROLL**
Switches from a Disassembly to a Core display.

› **F string FIRST/LAST /NEXT/PREV**
Finds the specified string, which may be character, in single or double quotes or a hexadecimal string in the format X'*xxxx..xxxx*'.

› **MAP or MAP** *map-name*
Switches to a display mapped with field names.

› **RFIND**
Repeats the last FIND command issued.

› **SOURCE**
Switches to a Source display if source support is available.

› ***-xxxxxx, +xxxxxx, =xxxxxx***
Adjusts the start offset of the disassembly.

Core Display Commands

› **ASSEM**
Switches from a Core to a Disassembly display.

› **F** *string* **FIRST/LAST /NEXT/PREV**
Finds the specified string, which may be character, in single or double quotes or a hexadecimal string in the format X'*xxxx..xxxx*'.

› **MAP or MAP** *map-name*
Switches to a display mapped with field names.

› **RFIND**
Repeats the last FIND command issued.

› **SOURCE or ROLL**
Switches to a Source display if source support is available.

› ***-xxxxxx, +xxxxxx, =xxxxxx***
Adjusts the start offset of the disassembly.

Toggle Commands

› **ABAR**
Turns the action bar tab items on and off.

› **ADATA**
Turns the Source Display Associated Data window on and off.

› **DATA**
Changes both the current ADATA and FDATA switch settings. So it turns both off, turns both on or reverses the settings.

› **FDATA**
Turns the Source Display Field Data Value feature on and off.

› **HEX**
Forces all data on the Source display or Mapped display to be shown in hexadecimal or to return to the default data type display.

› **MODE**
Switches the ZOOM address AMODE from 31 bit to 24 bit and back.

› **ZFORMAT**
Turns on and off the ZOOM format flag.

Miscellaneous Commands

› ***address***
Displays the screen for an address.

› ***control-block-name***
Displays any language, CICS, DL/1 and DB2 control block when a short name is typed.

Examples include: COM, DSA, TGT, WKS, STATIC (PL/I). See the *ASG-SmartQuest User's Guide* for a complete list.

› **HELP**
Displays online help information for any type of display.

› **PFSHOW or KEYS**
Displays a pop-up screen that lets you customize the commands assigned to the 24 PF keys.

› ***program-name***
Displays any program in the program calling chain.

› **RETRIEVE**
Recalls to the command line the last 20 commands entered in sequence.

› **R***nn*
Displays the storage at the address contained in register *nn* (where *nn* is in the range 0 through 15).

› **R***nn+xxx*
Resembles the R*nn* command except the hexadecimal offset *xxx* (in the range 0 through FFF) is added to the register address to calculate the address to display.

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